



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

January 6, 2014

Mr. Malcolm Charles
Directorate of Public Works
Attn: SDAT-CCA-MI (Charles)
410 Norman Avenue
Concord, California 94520

Subject: Draft Environmental Impact Statement for the Modernization and Repair of Piers 2 and 3,
Military Ocean Terminal Concord (MOTCO), Concord, California (CEQ # 20130342)

Dear Mr. Charles:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our detailed comments are enclosed.

The Draft Environmental Impact Statement (DEIS) assesses the impacts of the modernization and repair of Piers 2 and 3, Military Ocean Terminal Concord (MOTCO) that is required due to structural decay caused by severe deterioration, wide-spread marine borer damage, and fungal decay. Based on our review, we have rated the DEIS's preferred alternative as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions"). Our concerns are based on the potential impacts from unexploded ordnance during pier construction and the need for further explanation for how these impacts will be avoided. We also have recommendations and/or request additional information on noise impacts, air quality, recreational resources, and measures to prevent pollution during pier operations.

EPA appreciates the opportunity to review this DEIS. When the Final EIS is released for public review, please send one copy to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3521, or contact Karen Vitulano, the lead reviewer for this project, at 415-947-4178 or vitulano.karen@epa.gov.

Sincerely,

A handwritten signature in black ink that reads "Kathleen Martyn Goforth".

For

Kathleen Martyn Goforth, Manager
Environmental Review Office

Enclosure: Summary of EPA Rating Definitions
EPA's Detailed Comments

cc: Dick Butler, National Marine Fisheries Service
Tom Leatherman, Port Chicago Naval Magazine National Memorial

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

“LO” (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

“EC” (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

“EO” (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

“EU” (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

Category “1” (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category “2” (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category “3” (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

Contaminated Sites

The DEIS notes that project construction in the blast area of the 1944 Port Chicago explosion could encounter munitions and explosives of concern (MEC) and unexploded ordnance (UXO). However, the DEIS concludes that impacts associated with Military Munitions Response Sites are considered minor because the demolition and construction contractors would conduct all work in accordance with DoD Ammunition and Explosives Safety Standards, and an Explosives Safety Submission would be required prior to the start of activities to minimize serious injury, loss of life, and damage to property (p. 4-77). In addition, the contractor would be required to prepare, submit, and follow other safety plans including: an UXO Anomaly Avoidance Plan / UXO Support During Construction Activities Plan; Environmental Protection Plan; Quality Control Plan; Hazard Analysis; and Safety and Health Plan.

We recommend including additional information in the FEIS to support the conclusion that impacts would be considered minor. The DEIS states that extensive reconnaissance at Pier 2 in 2003 revealed that pile driving could proceed with low risk of encountering MEC (p. 4-77). The DEIS does not describe the extent of this extensive reconnaissance effort, and whether it was a visual reconnaissance of the bottom sediments or if it involved a more in-depth investigation. If the reconnaissance was limited to surface exploration only, the conclusion of a low risk of encountering MEC may not be accurate. The document further states that a subsequent remedial project encountered and safely removed MEC and UXO, thus increasing the risk of encountering MEC in some locations from low to moderate. No other information regarding this remedial project, which referenced a 2009 Corps of Engineers report, is included. The locations of moderate risk are not identified, nor is their relationship to the project site disclosed.

Further, we are aware that in late 2012, the Army completed its Phase 1 Remedial Investigation (RI) field work for the Port Chicago Explosion, Off-Shore and Terrestrial Munitions Response Sites (MRS). The Phase 1 RI field work for the Off-Shore MRS included underwater geophysics and side-scan sonar that identified significant “anomalies” (i.e., a geophysical response that suggests a metallic object) around the northern perimeters of the piers. Side scan sonar confirmed that many of the anomalies were not on the surface of the bay bottom but were buried beneath the sediment surface. Geophysical tools and data cannot determine the depth at which an anomaly is buried; physical excavation would be required. Therefore, the RI work conducted in 2012 suggests potential munitions near the piers may have been buried by sediment. This RI work did not involve excavating buried MEC or UXO from underwater.

The DEIS cites the preparation and implementation of an UXO Anomaly Avoidance Plan as part of the basis for its conclusion that impacts associated with Military Munitions Response Sites are considered minor. It is not clear, however, how the Army and its contractors can avoid anomalies during Pier 2 construction if it will need to drive pilings in an area that contains significant anomalies.

Recommendation: For the FEIS, we recommend that Section 4.13.2.4 - the discussion of contaminated sites - clarify the extent of the 2003 investigation. Remove the conclusion that there is low risk of encountering MEC if that reconnaissance was limited to surface-level only. Include additional information regarding the recent remedial project in the Tidal Area which references a 2009 Army Corps of Engineers report. Include information from the 2012 Phase I

RI as it relates to the project site. Describe how the Army and contractors will avoid the anomalies during pile driving.

The FEIS should discuss whether there were any known explosive incidents during the original construction of Pier 2 or Pier 3, which occurred after the Port Chicago explosion.

We emphasize the importance of the Explosives Safety Submission for the project. Ensure the requirement for the Explosives Safety Submission is included in the FEIS and the Army's Record of Decision.

Noise Impacts

The noise impact assessment focuses on construction noise and identifies the Occupational Safety and Health (OSHA) worker standard for noise exposure. According to OSHA, an employee should not be subjected to continuous noise exceeding 90 decibels (dB) for more than 8 hours per day (p. 3-81). The impact assessment uses this OSHA standard as the significance threshold for noise impacts, stating that impacts would be significant if sound levels at a sensitive receptor exceed 90 dB (p. 4-65). It is inappropriate to use an OSHA standard as a significance threshold for residents. Despite identification of the OSHA standard as the significance threshold, the DEIS concludes that for the preferred alternative 1, noise impacts from construction would attenuate to 65 dB or less in all areas; therefore, noise impacts from the preferred alternative would be minor (p. 4-68). This conclusion cites research that indicates that about 87% of the population is not highly annoyed by outdoor sound levels below 65 dB (day-night average) (p. 4-65). We note that EPA guidance on safe noise levels¹ contains a conservative goal of 55 dB for outdoor residential areas to protect the public health and welfare with an adequate margin of error. We accept the use of 65 dB as an appropriate significance threshold for noise impacts; however, consistent with the consolidated Federal agency land use compatibility guidelines identified by the Federal Interagency Committee on Urban Noise (FICUN).

Based on this analysis, it appears noise impacts could potentially be attenuated below the more appropriate significance threshold of 65 dB; however, considering the project will be performing one of the loudest construction activities – pile driving – for almost 11 months (p. 4-38), it is important to ensure that all mitigation to address noise from pile driving is implemented. The DEIS states that a cushion block of wood or composite (Micarta) material would be used to reduce the noise generated by impact pile driving (p. 4-35) but this is not included in the Best Management Practices or mitigation measures. In addition, because noise is subjective and the impulse nature of the noise may be more annoying than continuous noise, some outreach to the community should occur.

In addition, we note that, depending on the noise attenuation provided by the structures of the 3 schools in the area (located between 2.4-2.7 miles from the construction site), classroom noise levels during construction may not be less than 35 dB Leq (equivalent continuous noise level) during teaching sessions, which is the level needed to be able to hear and understand spoken messages in classrooms². The DEIS does not assess this potential impact to children.

¹ *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety* (EPA, 1974). Available: <http://www.nonoise.org/library/levels74/levels74.htm>. This level was defined by negotiated scientific consensus without concern for economic or technological feasibility.

² World Health Organization, Guidelines on Community Noise. Available: <http://www.who.int/docstore/peh/noise/Commnoise4.htm>.

Regarding underwater noise, the DEIS concludes that noise would exceed established thresholds for fish behavioral disturbance daily during the 43 weeks of pile driving, but concludes that because this is temporary, the impact is not significant (p. 4-38). It does not appear that all measures to reduce underwater noise have been included.

Recommendation: Include the identified noise reduction technique (cushion block of wood or composite material) for pile driving in the mitigation measures section of the FEIS. Discuss whether it is likely that nearby schools will achieve the WHO-recommended classroom noise level of <35 dBA Leq. Because there is the potential for some residents (>12%) to be highly annoyed, and, in turn, larger percentages to be moderately annoyed, we recommend that outreach to the community occur. Suggestions include informing the community in advance of construction activities and providing educational material and information on the project schedule. We also suggest providing a mechanism for complaints. If multiple complaints are received, commit to noise monitoring at the complainant location to confirm that levels are not higher than predicted and to assess the need for additional mitigation.

Regarding impacts to fish, we recommend consulting with the National Marine Fisheries Service on noise mitigation and impacts. In their pre-scoping comments, NMFS recommended that bubble curtains be used during pile driving (p. A-9) but this is not included in the mitigation measures chapter. Bubble curtains can reduce noise impacts and we recommend their use since the project would involve a long construction period.

Air Quality

The DEIS states that “it is anticipated that BMPs and California-required vehicle retrofits and emissions system modifications would be implemented by the contractors” (p. 4-25). Because the project will be constructed in an area in nonattainment for the National Ambient Air Quality Standards for ozone and particulate matter less than 2.5 microns (PM_{2.5}), the Army should ensure these Best Management Practices and emission reductions occur.

Recommendation: Include construction emissions mitigation measures in the FEIS and include them as requirements in all construction contracts. We recommend the following, as included in our scoping comments:

- Limit idling of heavy equipment to less than 5 minutes and verify through unscheduled inspections. The California Resources Board (CARB) has a number of mobile source anti-idling requirements; see their website at: <http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm>;
- Maintain and tune engines per manufacturer’s specifications to perform at CARB and/or EPA certification levels, prevent tampering, and conduct unscheduled inspections to ensure these measures are followed;
- If practicable, lease new, clean equipment meeting the most stringent of applicable Federal³ or State Standards⁴. In general, commit to the best available emissions control technology.

³ EPA's website for nonroad mobile sources is <http://www.epa.gov/nonroad/>.

⁴ For ARB emissions standards, see: <http://www.arb.ca.gov/msprog/offroad/offroad.htm>.

Tier 4 engines should be used for project construction equipment to the maximum extent feasible⁵;

- Lacking availability of non-road construction equipment that meets Tier 4 engine standards, the Army or implementing agency should commit to using CARB and EPA-verified particulate traps, oxidation catalysts and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site;
- Consider alternative fuels such as natural gas and electricity (plug-in or battery);
- Implement fugitive dust source controls for any land areas that will be disturbed, including stabilizing open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate, installing wind fencing, etc. When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph).

Impacts to Wetlands

The dredging that would occur under the Preferred Alternative would move approximately 750 cubic yards of shoal material adjacent to Pier 2 using a bed-leveler device and would not remove the dredged material from the bay. Permanent impacts associated with Alternative 1 include a potential net gain of 0.041 acres of estuarine intertidal wetlands and a net gain of 0.781 acre of unshaded subtidal habitat due to the removal of existing Pier 2 and its replacement by a smaller structure. The DEIS notes that the net gain of estuarine intertidal wetlands would be contingent on successful habitat restoration within the areas currently occupied by structures. The DEIS appears to state that temporary impacts to wetlands in the 100-foot disturbance buffer would also be restored, because demolition would be conducted from the water as much as possible, sometimes working from the mud substrate (p. 2-4). We encourage this restoration so that wetlands impacts could be beneficial and achieve a net gain. The DEIS states that the project would obtain a Clean Water Act Section 404 permit. EPA will work with the Corps of Engineers in reviewing the restoration plan.

While not involved in the project, we do have concerns that large areas of wetlands at MOTCO are shown on the land use map as “available for development” (p. 3-70, p. 3-12).

Recommendation: Confirm in the FEIS that all wetlands, including those impacted temporarily by construction, will be restored. We encourage the Army to avoid future development in the areas designated as “available for development” on the land use map if wetlands are present in those areas. Consider amending this designation at the next planning opportunity.

Operational Phase Impacts

The DEIS states that there will be no changes in the number of loading and unloading missions executed at MOTCO under the proposed action (p. 2-27) and operational activities would not change (p. 5-16). Therefore, the DEIS did not evaluate impacts from pier operations. Changes to the pier and related infrastructure; however, offer opportunities to reduce operational impacts and it is appropriate to address these opportunities in the EIS.

For example, the DEIS references accidental spills of hazardous materials since the 1940’s that led to contamination of soils and groundwater, and states that the Spill Prevention, Control, and

⁵ Diesel engines < 25 hp rated power started phasing in Tier 4 Model Years in 2008. Larger Tier 4 diesel engines will be phased in depending on the rated power (e.g., 25 hp - <75 hp: 2013; 75 hp - < 175 hp: 2012-2013; 175 hp - < 750 hp: 2011 - 2013; and ≥ 750 hp 2011- 2015).

Countermeasures Plan would be updated. It is not clear if there are structural BMPs, in addition to practices, that could be included in the project design to prevent or contain spills that occur during unloading or vessel fueling. In addition, the pier design could include infrastructure for managing and disposing of bilge and ballast water from vessels. Bilge water can contain invasive species and Executive Order 13112, *Invasive Species* (February 3, 1999) mandates that federal agencies take actions to prevent the introduction of invasive species (terrestrial and marine). The DEIS does not discuss how design of the new pier will facilitate compliance with this E.O. and provide for proper disposal of bilge and ballast waters that could contain marine invasive species. Additionally, a new pier and infrastructure could address at-berth air emissions. The Army should ensure the new pier design includes shore power for vessels to reduce ship at-berth (or hoteling) emissions.

Recommendation: Identify if structural components of the new pier would reduce the potential for spills during unloading or fueling, reduce or eliminate the potential for marine invasive species introduction, and reduce ship at-berth air emissions by providing shore power. If these components are not included, modify the design to include them or explain why they are not included.

Recreational Resources

The DEIS concludes that minor, short-term adverse impacts associated with potential access restrictions to the Port Chicago Naval Magazine National Memorial, administered by the National Park Service and the Navy, would occur with project construction (p. 3-78, 4-65). It indicates that, in most cases, the Memorial would still be accessible on Saturdays unless work crews are scheduled to work on the weekends (p. 4-65). No information is included regarding how the public will be notified of these restrictions. The Port Chicago Naval Magazine National Memorial website indicates that every July, an annual commemorative event takes place at the Memorial to honor those who died at Port Chicago while serving their country during World War II. It is not clear if project construction will impact this annual commemorative event.

Recommendation: The Army should work with the National Park Service and the Navy to provide advance public notice that access would be limited during the demolition and construction period which is projected to last over a year (69 weeks). Identify this commitment in the FEIS and disclose whether the annual commemorative event will be impacted or if the Army plans to suspend construction for this event. If the latter, identify this as a mitigation measure in the FEIS.